

1. A windscreens deflector assembly for an automotive vehicle having a  
2 passenger compartment extending between opposing side walls and a rear end,  
wherein the passenger compartment includes front seats and rear seats, said  
4 windscreens deflector assembly comprising:  
a flexible membrane element;  
6 a first cross member interconnected with an end of the membrane  
element;  
8 a second cross member operatively coupled to the vehicle for  
movement between a retracted position disposed along the rear end of the passenger  
10 compartment and a use position disposed between the front and rear seats of the  
passenger compartment;  
12 a linkage operatively coupled between the first and second cross  
members so that the first cross member is carried by the second cross member during  
14 movement between the retracted and use positions, whereby the first cross member in  
the use position is spaced above the second cross member such that the membrane  
16 element extends between the first and second cross members to form a generally  
upright windscreens portion and further extends between the second cross member and  
18 the rear end of the passenger compartment to form a generally horizontal cover  
portion covering the rear seats of the passenger compartment.

2. A windscreens deflector assembly as set forth in claim 1, wherein the  
2 first cross member includes a transversely extending beam fixedly secured to the end  
of the membrane element.

3. A windscreens deflector assembly as set forth in claim 2, wherein the  
2 first cross member includes side members extending from respective opposite ends of  
the beam.

4. A windscreens deflector assembly as set forth in claim 3, wherein the  
2 second cross member includes a transversely extending cross bar and a pair of legs  
extending from respective opposite sides thereof.

5. A windscreens deflector assembly as set forth in claim 4, wherein the  
2 linkage includes a pair of first and second links arranged as a four-bar link connecting  
the side members of the first cross member and the legs of the second cross member.

6. A windscreens deflector assembly as set forth in claim 4, wherein a  
2 portion of at least one of the side members of the first cross member and legs of the  
second cross member is offset transversely to accommodate articulation of the linkage  
4 as the first and second cross members are moved between the retracted and use  
positions.

7. A windscreens deflector assembly as set forth in claim 5 including a rod  
2 extending between one end pivotally coupled to the vehicle and an opposite end  
pivotally coupled to one of the first and second links.

8. A windscreens deflector assembly as set forth in claim 4, wherein the  
2 legs are pivotally coupled to the vehicle for movement of the second cross member  
between the retracted and use positions.

9. A windscreens deflector assembly as set forth in claim 3, wherein each  
2 side member is generally S-shaped to define an inner portion that extends  
orthogonally from the beam.

10. A windscreens deflector assembly as set forth in claim 9, wherein each  
2 side member is generally S-shaped to define an outer portion that is spaced  
transversely from the inner portion defining a space between the side member and the  
4 leg to accommodate the linkage therebetween.

11. A windscreens deflector assembly as set forth in claim 1 including a  
2 spool rotatably coupled to the vehicle, the spool adapted to be fixedly secured to a  
second end of the membrane element, the spool being continuously rotatably biased  
4 so the membrane element is wound about the spool as the first and second cross  
members are moved to the retracted position.

12. A windscreens deflector assembly as set forth in claim 4, wherein the  
2 beam and the cross bar remain substantially parallel as the first and second cross  
members articulate between the retracted and use positions.

13. A windscreens deflector assembly as set forth in claim 4, wherein the  
2 beam is adjacent the cross bar in the retracted position.

14. A windscreens deflector assembly for an automotive vehicle having a  
2 passenger compartment including front seats and rear seats, said windscreens deflector  
assembly comprising:

4 a flexible membrane element, a first cross member, and a second cross  
member;

6 wherein both first and second cross members have a retracted position  
with at least one of the first and second cross members disposed adjacent the rear end  
8 of the passenger compartment and a use position with both first and second cross  
members positioned between the front and rear seats with one of the first and second cross  
10 members spaced substantially above the other of the first and second cross  
members, such that in the use position the membrane element extends between the  
12 first and second cross members to form a generally upright windscreens portion and  
further extends between the lower of the cross members and the rear end of the  
14 passenger compartment to form a generally horizontal cover portion covering the rear  
seats of the passenger compartment.

15. A windscreens deflector assembly as set forth in claim 14, wherein the  
2 first cross member includes a transversely extending beam fixedly secured to an end  
of the membrane element.

16. A windscreens deflector assembly as set forth in claim 15, wherein the  
2 first cross member includes side members extending from respective opposite ends of  
the beam.

17. A windscreens deflector assembly as set forth in claim 16, wherein the  
2 second cross member includes a transversely extending cross bar and a pair of legs  
extending from respective opposite sides thereof.

18. A windscreens deflector assembly as set forth in claim 17, wherein the  
2 linkage includes a pair of first and second links arranged as a four-bar link connecting  
the side members of the first cross member and the legs of the second cross member.

19. A windscreens deflector assembly for an automotive vehicle having a  
2 passenger compartment extending between opposing side walls and a rear end,  
wherein the passenger compartment includes a front seat, said windscreens deflector  
4 assembly comprising:

6 a flexible membrane element;  
8 a first cross member having a transversely extending beam  
interconnected with an end of the membrane element;  
10 a second cross member having a transversely extending cross bar  
operatively coupled to the vehicle for movement between a retracted position with the  
cross bar disposed along the rear end of the passenger compartment and a use position  
with the cross bar disposed behind the front seat of the passenger compartment;  
12 a linkage operatively coupled between the first and second cross  
members so that the first cross member is carried by the second cross member during  
14 movement between the retracted and use positions.

20. A windscreens deflector assembly as set forth in claim 19, wherein the  
2 first cross member includes generally parallel and spaced apart side members  
extending substantially orthogonally from opposite ends of the transversely extending  
4 beam.

21. A windscreens deflector assembly as set forth in claim 20, wherein the  
2 second cross member includes generally parallel and spaced apart legs extending from  
opposite ends of the transversely extending cross bar, the legs being pivotally coupled  
4 to the vehicle for movement of the second cross member between the retracted and  
use positions.

22. A windscreens deflector assembly as set forth in claim 21, wherein the  
2 linkage includes a pair of first and second links arranged as a four-bar link connecting  
the side members of the first cross member and the legs of the second cross member.

23. A windscreens deflector assembly as set forth in claim 19, wherein the  
2 cross bar in the use position is disposed between the front seat and a rear seat of the  
passenger compartment.

24. A windscreens deflector assembly as set forth in claim 1 including a  
2 cover operatively coupled to the vehicle for movement with the first and second cross  
members between the retracted and use positions, wherein the cover in the retracted  
4 position overlies the first and second cross members.